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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,002	12/15/2005	Joachim Haedicke	2002P00990WOUS	8810

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EXAMINER

WONG, KWOK CHEUNG

ART UNIT	PAPER NUMBER
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4156

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01/18/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/529,002	Applicant(s) HAEDICKE ET AL.	
	Examiner KWOK C. WONG	Art Unit 4156	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-26 is/are rejected.
- 7) ☒ Claim(s) 22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 1/9/2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. EP02021405.2.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/24/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because the elements "gas tap" and "gas path" are both labeled as Element 6 in the abstract. Correction is required. See MPEP § 608.01(b).

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: Figure 1, gas path (element 6); Figure 2, gas inlet (element 5); Figure 2, gas outlet (element 7); Figure 2, electrical terminal contacts (element 49); Figure 2 and 3, union nut (element 43); Figure 3, peripheral flange (element 41); Figure 4, magnetic insert (element 9); Figure 4, armature housing (19). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "11" and "43" have both been used to designate "union nut". Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "39" and "45" have both been used to designate "electromagnetic coil". Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and

informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

1. Claim 22 is objected to because of the following informalities: Grammatical mistake "...at least one of..." on the 2nd line of the claim. Appropriate correction is required.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
2. Claim 25 recites the limitation "...said counter-anchor..." on the 2nd line of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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2. Claims 14-18, 23-24, and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 4697608 (Kolze et al., October 6, 1987) due to a lack of novelty.

3. Figures 4 & 6 (below) from Kolze et al. discloses the elements of Claim 14 as follows:

A gas tap (as seen in Figs 4 & 6) including a gas path (as seen in Figs 4 & 6), comprising:

an electromagnetic safety valve for closing the gas path [Abstract, Lines 1-6];

said safety valve including an armature housing (as seen in Figs 4 & 6) and having

a mobile magnetic anchor in said housing [Column 5, Line 30; as seen in Figs 4 & 6];

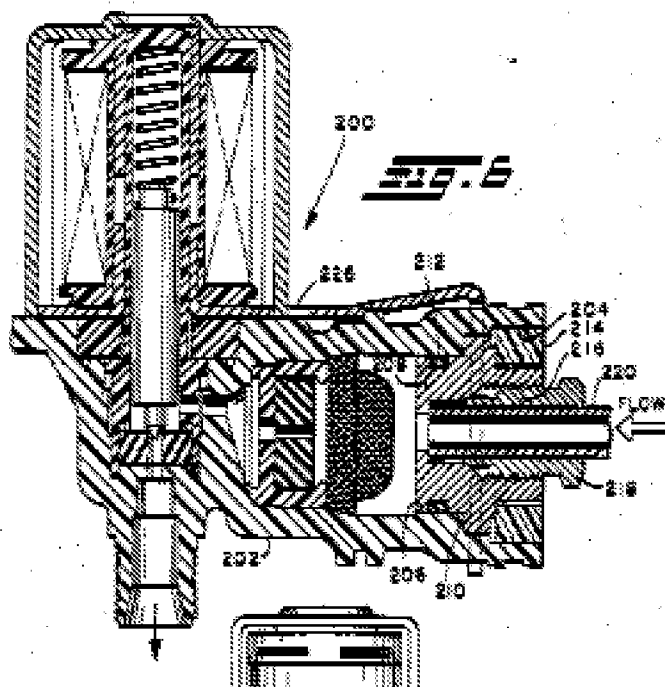
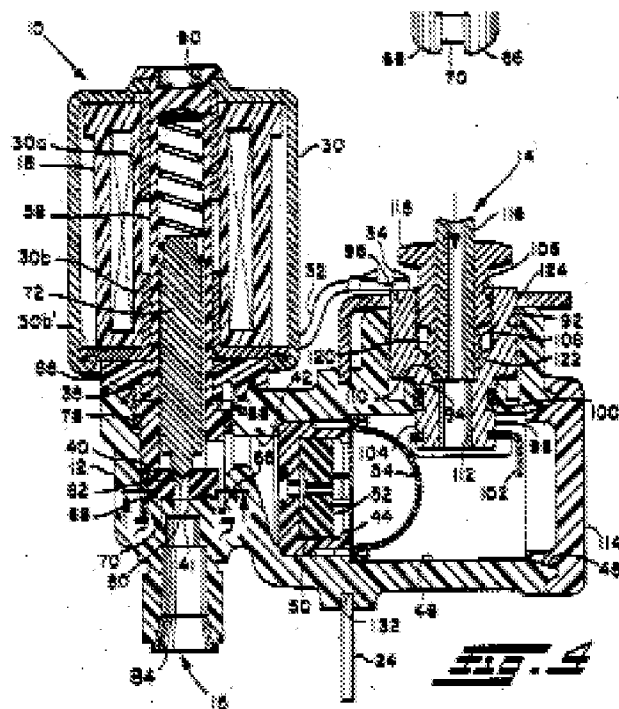
a valve seat [Column 5, Lines 4-8];

said mobile magnetic anchor including a valve closing element which presses on said valve seat to close said gas path [Column 5, Lines 30-39];

an electromagnetic coil for activating said mobile magnetic anchor and valve closing element to close said gas path when voltage is applied to said electromagnetic coil [Column 2,

Lines 3-6]; and
said electromagnetic coil arranged as a separate component
outside of said armature housing on a magnetic insert
[Column 2, Lines 6-8].

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4. In Claim 15, Figures 4 & 6 of Kolze et al. show the electromagnetic coil arranged separate from the gas path.

5. In Claim 16, Figures 4 & 6 of Kolze et al. show the electromagnetic coil outside of the armature housing and is able to be detached.

6. In Claim 17, Figures 4 & 6 of Kolze et al. show the electromagnetic coil outside of the gas tap.

7. In Claim 18, Figures 4 & 6 of Kolze et al. show the electromagnetic coil partially protruding outside of the gas tap.

8. In Claim 23, it can be seen from Figures 4 & 6 of Kolze et al. that the armature housing has one section set inside the gas tap and another section projecting from the gas tap.

9. In Claim 24, Figures 4 & 6 of Kolze et al. show a portion of the armature section set inside of the gas tap similar in structure to that of housing sections of a magnetic insert.

10. Figures 4 & 6 (above) from Kolze et al. discloses the elements of Claim 26 as follows:

A magnetic insert [Column 4, Lines 24-28; Column 5, Lines 49-68] for an electromagnetic safety valve for inserting into a gas tap including a gas path (as seen in Figs 4 & 6), the magnetic insert comprising:

an armature housing and having a mobile magnetic anchor in said

housing [Column 5, Line 30; as seen in Figs 4 & 6];

a valve seat [Column 5, Lines 4-8];

said mobile magnetic anchor including a valve closing element which

presses on said valve seat to close said gas path [Column 5, Lines 30-39];

an electromagnetic coil for activating said mobile magnetic anchor and

valve closing element to close said gas path when voltage is

applied to said electromagnetic coil [Column 2, Lines 3-6]; and

said electromagnetic coil arranged as a separate component outside of

said armature housing on a magnetic insert [Column 2, Lines 6-8].

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kolze et al., and in view of U.S. Patent 3849031 (Charboneau et al., November 19, 1974).

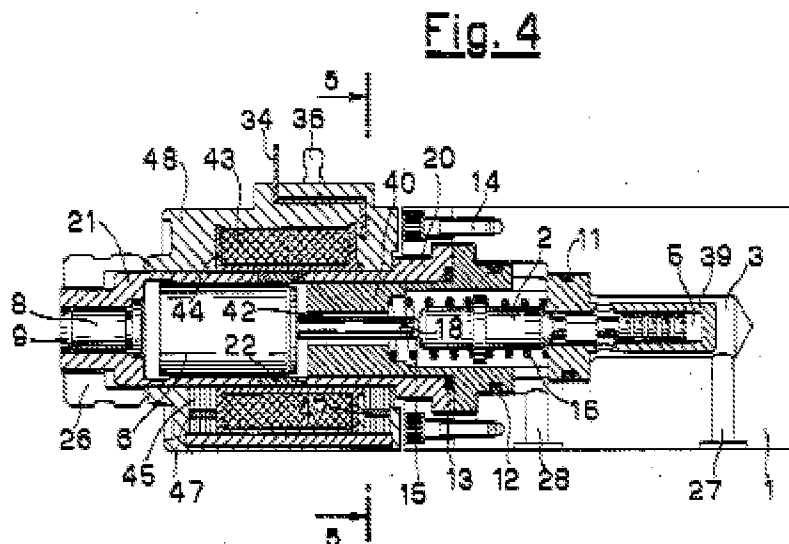
In Claim 19, Charboneau et al. [Column 2, Lines 12-23] teaches the use of armature guide sections as a means to prevent rotation on the armature and to keep it parallel to the axis.

While in Claim 21, Kolze et al. [Abstract, Lines 3-6; Column 2, Lines 8-32; Column 5, Lines 6-8, 20-23] teaches the use of plastic armature guide sections due to costly replacement of armature, armature guides, coils, and mountings.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the electromagnetic safety valve disclosed by Kolze et al. with armature guide sections taught by both Charboneau et al. and plastic guides disclosed by Kolze et al. to keep the armature parallel to the axis of motion and keeping the armature from rotating due to magnetic forces as well as preventing the replacement of costly parts.

3. Claims 20 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kolze et al., in view of Charboneau et al., and in further view of U.S. Patent 3945399 (Tirelli, March 23, 1976).

In Claim 20, Tirelli '399 [Column 6, Lines 18-31] teaches the use of an anchor guide section positioned inside of a gas tap for sealing engagement and an anchor guide section positioned outside of the gas tap as shown in Figure 4 of Tirelli '399 below.



In Claim 25, Tirelli '399 [Column 5, Lines 9-13; Column 6, Lines 32-43] teaches the use of counter-anchor as a device to attract (or repel) the magnetic anchor (armature) via a magnetic field as a result of an electric current applied to the electromagnetic coils. It is clear from Figure 4 above that at least one of electromagnetic coil, armature housing sections, counter-anchor are provided on a second armature housing section projecting from the gas tap.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the electromagnetic safety valve disclosed by Kolze et al. with a counter-anchor, coil, and armature housing projecting from the gas tap to provide support for armature travel into and out of the gas tap for sealing and opening.

4. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kolze et al., in view of U.S. Patent 3899003 (Tirelli, August 12, 1975).

In Claim 22, Tirelli '003 [Column 3, Lines 66-68; Column 4, Lines 1-25] teaches the use of a counter-anchor in an armature housing limiting the armature stroke path due to magnetic attractive forces.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the electromagnetic safety valve disclosed by Kolze et al. with an counter-anchor that due to magnetic forces, limits the travel of the armature stroke path.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KWOK C. WONG whose telephone number is (571)270-3764. The examiner can normally be reached on M-F 7:30-5:00 EST (alt. Fridays off).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Isabella can be reached on 571-272-4749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kwok C. Wong
Patent Examiner
January 15, 2008

/DAVID J ISABELLA/
Supervisory Patent Examiner, Art Unit 4156